

Amendments to the Specification:

On page 1, prior to the first paragraph which begins on line 2, please insert the following:

FIELD OF THE INVENTION

On page 1, prior to the second paragraph which begins on line 4, please insert the following:

BACKGROUND OF THE INVENTION

On page 4, prior to the paragraph which begins on line 16, please insert the following:

SUMMARY OF THE INVENTION

Please replace the paragraph which begins on page 4, line 20 and ends on page 5, line 25, with the following rewritten paragraph:

The object is achieved according to the invention which is embodied as a by the ~~pressure sensor as claimed in the independent claim 1 and the method of the independent claim 15.~~

~~The pressure sensor of the invention includes~~ including:

a pressure measurement cell having an essentially cylindrical platform of a first diameter and a first thickness, and a measuring membrane of a second diameter and a second thickness joined to an end face of the platform,

an elastic sealing ring of a third diameter and a third thickness,

a support ring of a fourth outer diameter, a fourth inner diameter and a fourth thickness, with the support ring being securely connected with the end face of the pressure measurement cell facing away from the measuring membrane,

a clamping ring having a first engagement means, and

a housing for accommodating a pressure measurement cell, with the housing

having an axial bearing surface for the seal and second engagement means, which engages with the first engagement means,

with the pressure measurement cell being axially clamped by means of the clamping ring between the elastic sealing ring, which is arranged between the axial bearing surface of the housing and the membrane-bearing end face of the pressure measurement cell, and the support ring,

wherein, additionally,

a stiff decoupling element is arranged between the clamping ring and the support ring, and

the dimensions of the support ring and, if necessary, the decoupling element are coordinated with the dimensions of the sealing ring and the pressure measurement cell such that a radial deformation of the membrane-bearing end face caused by the axial clamping of the pressure measurement cell is so small, that the span error of the pressure sensor on the basis of a reduction of the axial clamping force by at least 10% amounts to not more than about 0.02% and the temperature hysteresis of the span amounts to not more than about 0.03%.

On page 8, prior to the paragraph which begins on line 5, please insert the following:

BRIEF DESCRIPTION OF THE DRAWING

Please replace the paragraph which begins on page 8, line 5, and which ends on line 13, with the following rewritten paragraph:

The invention will now be explained in greater detail on the basis of an example of an embodiment illustrated in the accompanying figures, which show as follows:

Fig. [[1a]] a sectional view of a pressure sensor of the invention;

Figs. [[2a-cschematic]] 2a-c schematic views of different variants of the

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decoupling element of the pressure sensor of the invention; and

Figs. [[3a-cFEM]] 3a-c FEM data on the deformation of a pressure measurement cell under axial clamping.

On page 8, prior to the paragraph which begins on line 13, please insert the following:

DESCRIPTION OF THE PREFERRED EMBODIMENTS